**Binomial Expansions**

The binomial theorem is used to expand brackets. It states:

Example: Expand

The general term in is:

The constant term is the one with (i.e. independent of )

Questions:

1. **Find the general term for**

1. **State the 4th term in the expansion**

General term:

4th term is when r = 3:

1. **What is the constant term in the expansion of ?**

(adding powers of )

The constant term occurs when the power of is 0, i.e when . Therefore the constant term occurs when, the 5th term.

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Delta: Ex 27.6 pages 254 – 255, Q 1 – 3, 7. Extension: everything else.